

What is claimed is:

1. A radio transmission method in which a plurality of transmission apparatus form a network to transmit information, comprising the steps of:

prescribing a predetermined frame period;

providing a management information transmitting field in said frame period;

providing a station sync transmit/receive interval in said management information transmitting field; and

designating an arbitrary communicating station to transmit a station synchronizing signal thereto at a plurality of frame period intervals during said station sync transmit/receive interval.

2. A radio transmission method according to claim 1, wherein

in order to specify a communicating station to transmit during said station sync transmit/receive interval, down-link control information is provided within said management information transmitting field and a control station designates in advance a communicating station for transmitting information in said frame period based on said down-link control information.

3. A radio transmission method according to claim 1, wherein

said frame period in which said station synchronizing signal is transmitted is changed depending on the number of communicating

stations forming the network.

4. A radio transmission method according to claim 1,
wherein

in order to specify a communicating station which transmits
in said frame period during said station sync transmit/receive
interval, down-link control information is provided within said
management information transmitting field and information on a
period for transmitting said station synchronizing signal and a
group of communicating stations for transmitting said station
synchronizing signal are specified in advance.

5. A radio transmission apparatus which serves as a control
station of a network when a plurality of transmission apparatus form
said network to transmit information among a plurality of other
communicating stations, said radio transmission apparatus
comprising:

communication processing means for transmitting and
receiving a radio signal;

station synchronizing setting means for transmitting a
synchronizing signal which determines a frame period using said
communication processing means, designating a management information
transmitting field within said frame period and setting a station
sync transmit/receive interval during which communicating stations
forming said network transmit and receive information within said
management information transmitting field; and

down-link control information transmitting means for

transmitting down-link control information for notifying a specific communicating station which transmits during said station sync transmit/receive interval.

6. A radio transmission apparatus for communicating information with a plurality of other communicating stations in a network formed by a plurality of transmission apparatus, said radio transmission apparatus comprising:

communication processing means for transmitting and receiving a radio signal;

frame period determining means for receiving a synchronizing signal determining a frame period using said communication processing means and determining the frame period;

management field specifying means for specifying a management information transmitting field within said frame period;

down-link management information receiving means for designating a communicating station from which information is transmitted at a designated position within said management information transmitting field; and

transmitting and receiving means for transmitting and receiving information based on a designation of said down-link management information.